

CLAIM AMENDMENT

**Please cancel claims 2, 3, 14, 16, 24-25 and 27-31 without prejudice or disclaimer.
Please add new claims 32-46 as set forth below.**

1. (Previously presented) A seed of the corn variety I390186, wherein a sample of the seed of the corn variety I390186 was deposited under ATCC Accession No. PTA-4491.
- 2-4. (Canceled)
5. (Previously presented) A corn plant produced by growing a seed of the corn variety I390186, wherein a sample of the seed of the corn variety I390186 was deposited under ATCC Accession No. PTA-4491.
6. (Original) The corn plant of claim 5, having:
 - (a) an SSR profile in accordance with the profile shown in Table 5; or
 - (b) an isozyme typing profile in accordance with the profile shown in Table 6.
7. (Original) A plant part of the corn plant of claim 5.
8. (Original) The plant part of claim 7, further defined as pollen.
9. (Original) The plant part of claim 7, further defined as an ovule.
10. (Original) The plant part of claim 7, further defined as a cell.
11. (Original) The plant part of claim 10, wherein said cell is further defined as having :
 - (a) an SSR profile in accordance with the profile shown in Table 5; or
 - (b) an isozyme typing profile in accordance with the profile shown in Table 6.
12. (Original) A seed comprising the cell of claim 10.

13. (Original) A tissue culture comprising the cell of claim 10.
14. (Canceled)
15. (Previously presented) A corn plant expressing all the physiological and morphological characteristics of the corn variety I390186, wherein a sample of the seed of the corn variety I390186 was deposited under ATCC Accession No. PTA-4491.
16. (Canceled) The corn plant of claim 15, further comprising a nuclear or cytoplasmic gene conferring male sterility.
17. (Previously presented) A tissue culture of regenerable cells of a plant of corn variety I390186, wherein the tissue regenerates plants expressing all the physiological and morphological characteristics of the corn variety I390186, wherein a sample of the seed of the corn variety I390186 was deposited under ATCC Accession No. PTA-4491.
18. (Original) The tissue culture of claim 17, wherein the regenerable cells comprise cells derived from embryos, immature embryos, meristematic cells, immature tassels, microspores, pollen, leaves, anthers, roots, root tips, silk, flowers, kernels, ears, cobs, husks, or stalks.
19. (Original) The tissue culture of claim 18, wherein the regenerable cells comprise protoplasts or callus cells.
20. (Previously presented) A corn plant regenerated from the tissue culture of claim 17, wherein the corn plant expresses all of the physiological and morphological characteristics of the corn variety designated I390186, wherein a sample of the seed of the corn variety I390186 was deposited under ATCC Accession No. PTA-4491.
21. (Previously presented) A process of producing corn seed, comprising crossing a first parent corn plant with a second parent corn plant, wherein one or both of the first or the second parent corn plant is a plant of the corn variety I390186, wherein a sample of the seed of the corn

variety I390186 was deposited under ATCC Accession No. PTA-4491, wherein seed is allowed to form.

22. (Previously presented) The process of claim 21, further defined as a process of producing hybrid corn seed, comprising crossing a first inbred corn plant with a second, distinct inbred corn plant, wherein the first or second inbred corn plant is a plant of the corn variety I390186, wherein a sample of the seed of the corn variety I390186 was deposited under ATCC Accession No. PTA-4491.

23. (Original) The process of claim 22, wherein crossing comprises the steps of:

- (a) planting the seeds of first and second inbred corn plants;
- (b) cultivating the seeds of said first and second inbred corn plants into plants that bear flowers;
- (c) preventing self pollination of at least one of the first or second inbred corn plant;
- (d) allowing cross-pollination to occur between the first and second inbred corn plants; and
- (e) harvesting seeds on at least one of the first or second inbred corn plants, said seeds resulting from said cross-pollination.

24-31. (Canceled)

32. (New): A method of producing a male sterile corn plant comprising transforming the corn plant of claim 5 with a nucleic acid molecule that confers male sterility.

33. (New): A male sterile corn plant produced by the method of claim 32.

34. (New): A method of producing an herbicide resistant corn plant comprising transforming the corn plant of claim 5 with a transgene that confers herbicide resistance.

35. (New): An herbicide resistant corn plant produced by the method of claim 34.

36. (New): The corn plant of claim 35, wherein the transgene confers resistance to an herbicide selected from the group consisting of glyphosate, sulfonylurea, and phosphinothricin.
37. (New): A method of producing an insect resistant corn plant comprising transforming the corn plant of claim 5 with a transgene that confers insect resistance.
38. (New): An insect resistant corn plant produced by the method of claim 37.
39. (New): The corn plant of claim 38, wherein the transgene encodes a *Bacillus thuringiensis* (Bt) toxin.
40. (New): A method of producing a disease resistant corn plant comprising transforming the corn plant of claim 5 with a transgene that confers disease resistance.
41. (New): A disease resistant corn plant produced by the method of claim 40.
42. (New): A method of introducing a desired trait into corn inbred line I390186 comprising:
- (a) crossing I390186 plants grown from I390186 seed, representative seed of which has been deposited under ATCC Accession No. PTA-4491, with plants of another corn line that comprise a desired trait to produce F1 progeny plants, wherein the desired trait is selected from the group consisting of male sterility, herbicide resistance, insect resistance, and disease resistance;
 - (b) selecting F1 progeny plants that have the desired trait to produce selected F1 progeny plants;
 - (c) crossing the selected progeny plants with the I390186 plants to produce backcross progeny plants;
 - (d) selecting for backcross progeny plants that have the desired trait and traits of corn inbred line I390186 listed in Table 3 to produce selected backcross progeny plants; and
 - (e) repeating steps (c) and (d) three or more times in succession to produce selected fourth or higher backcross progeny plants that comprise the desired trait and all of

the traits of corn inbred line I501150 listed in Table 3 as determined at the 5% significance level when grown in the same environmental conditions.

43. (New): A plant produced by the method of claim 42, wherein the plant has the desired trait and all of the traits of corn inbred line I501150 listed in Table 3 as determined at the 5% significance level when grown in the same environmental conditions.

44. (New): The plant of claim 43, wherein the desired trait is herbicide resistance and the resistance is conferred to an herbicide selected from the group consisting of: sulfonylurea, glyphosate, and phosphinothricin.

45. (New): The plant of claim 43, wherein the desired trait is insect resistance and the insect resistance is conferred by a transgene encoding a *Bacillus thuringiensis* (Bt) toxin.

46. (New): The plant of claim 43, wherein the desired trait is male sterility and the trait is conferred by a nucleic acid that confers male sterility.

RESPONSE TO OFFICE ACTION

A. Status of the Claims

Claims 2, 3, 14, 16, 24-25 and 27-31 have been canceled herein and new claims 32-46 have been added. The new claims correspond to the claims proposed by the Examiner. As set forth in that Office Action, support for the new claims can be found in the specification and claims as indicated by the Examiner. Claims 1, 5-13, 15, 17-23 and 32-46 are now pending and presented for reconsideration.

The Office is authorized to withdraw any fee that may become due in connection with the claim amendments from *Fulbright & Jaworski, L.L.P.* Account No. 50-1212/DEKA:288US.

B. Rejection of Claims Under 35 U.S.C. §112, Second Paragraph

Claims 2, 3, 14, 16 and 27-30 were rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out the subject matter which Applicants regard as the invention. Applicants respectfully traverse the rejection but note that, in the interest of compact prosecution of the instant case, the claims have been canceled herein. The rejection is therefore now moot.

C. Rejection of Claims Under 35 U.S.C. §112, First Paragraph – Enablement and Written Description

The Action rejects claims 24, 25 and 27-31 under 35 U.S.C. §112, first paragraph, as lacking enablement and not being supported by an adequate written description in the specification. Applicants respectfully traverse the rejection but note that, in the interest of compact prosecution of the instant case, the claims have been canceled herein.

New claims 32-46 have been added herein. The claims correspond to those suggested by the Examiner and have therefore been acknowledged to fully comply with 35 U.S.C. §112, first paragraph. It is thus believed that the rejection is now moot.

D. Conclusion

This is submitted to be a complete response to the referenced Office Action. In conclusion, Applicant submits that, in light of the foregoing remarks, the present case is in condition for allowance and such favorable action is respectfully requested.

The Examiner is invited to contact the undersigned at (512) 536-3085 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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